

Rail on the Pre-Slit Table stucked

Antonio and Pere. January 24th, 2018

With the information provided by Frank and Anton about the problem with that unit, we went to the container around 9:30 am.

Identified the unit and proceed according to the instructions received from Anton. Shown in Figure 1 (top) how the setup was found. By comparing both motorized rails (the one with the different fibres and the other with the iodine cell, first things we noticed was that:

- a) The bellow was expanded (as compare with the equivalent mounted with at the Iodine cell).
- b) It was "almost" touching the screws on the motor mounting.
- c) YES ! ! ! It was hard (very hard) to move it by hand (as compared with smoother movement of the other rail with I2 cell)

The whole system was taken into pieces to identify with part was responsible of the whole unit being stacked.

Problem was not with bearings in the rail as, once free, it moves very nicely

We found it!!!.

The grease on the nut (driven by the spindle) was completely SOLID ! ! ! and this prevents for a proper and smooth motion. At that point we cleaned it and use 4W (a non-silicone thermal grease) that will not become solid by any means. Everything smooth immediately after applying it! ! !

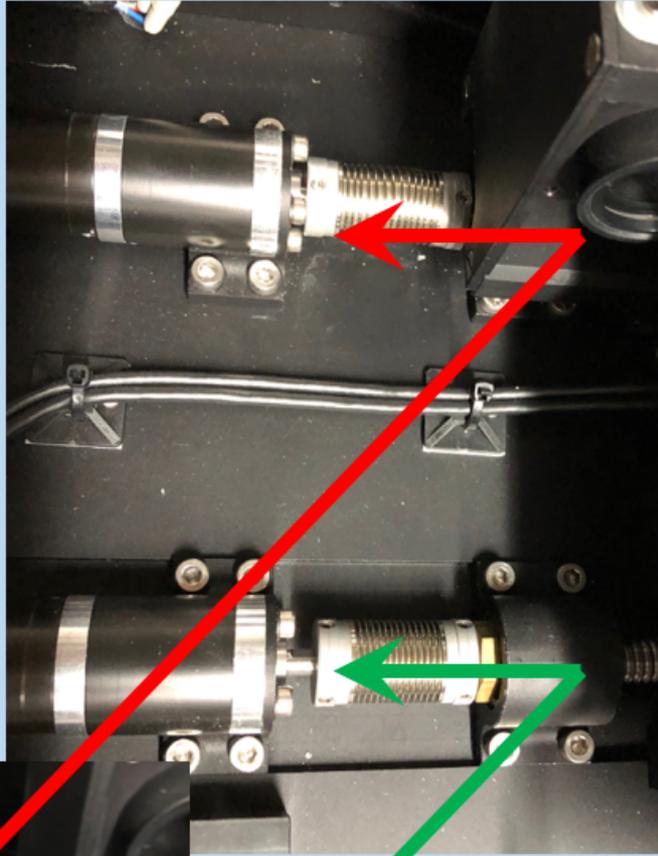
We then properly adjust and align all the components (better than before as can be seen in the lower photo of the Figure 1). Now everything aligned and moving by hand one rail or the other feels the same.

Skype with Anton who, remotely, switched on mains to the system and performed various tests by moving the rail to the different predefined positions (nominal-telescope light, Sun fibre, ThAr fibre, etc.)

Everything was OK.

This is it... For the moment

Before



After

